33/42/55 Series
WATER PUMP

INSTALLATION AND OPERATION MANUAL

Dear Mr. or Ms. :
Thanks for your purchasing our diaphragm pump.
We are one of the professional manufacturer focuses on researching developing and selling RV pumps and Marine water pumps. All products have past the CE certification. Our pumps are installed as alternative pumps in the existing water system. To achieve the best operation of the pumps, this instruction guide should be carefully read and all local or national installation specifications and standards should be followed.

I CUSTOMER WARRANTY SERVICE & TECHNICAL SUPPORT

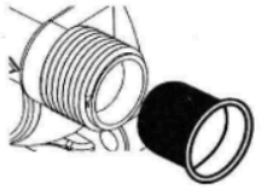
We have always been committed to providing customers with high-quality products and outstanding services. If you have any problems in the process of using, please CONTACT US , we will take care of them to your SATISFACTION!

- Have problems?
- Installation question?
- Need parts?
- Troubleshooting?

1.Contact us via Amazon order and click "Contact Seller".(Recommended)
2.Customer Support Email: infodchouse@sohu.com(If you do not know how to get in touch with us through your order)

We promise to provide our pump for 3 months refunds or replacement service, 2 years warranty period and permanent online after-sales technical support (Please refer to the warranty policy on the last page for details)
If any quality problem occurs within 3 months, please contact us anytime. We will provide refunds or replacement service when needed. Even after Amazon's return time limit, don't worry .
In our endeavor to provide the best quality cases to customers, we would encourage you to share your thoughts and opinions on our product on Amazon .
Enjoy the business relationship with you.
Customer Service Team

Remove the plugs at both ends of the inlet and outlet before use.
When the pump leaves the factory, a small amount of water may remain in the pump.
This is due to rigorous testing of the pump and does not mean that the pump has been used.



⚠ **WARNING**: Please read the following content carefully before installation and use to avoid product damage caused by improper use.

⚠ The 33/42/55 series is widely used in RV/Ships/replacements and can support transport fresh water, weak acid, weak alkali, weak salt and other liquids.

II INSTALLATION INSTRUCTIONS

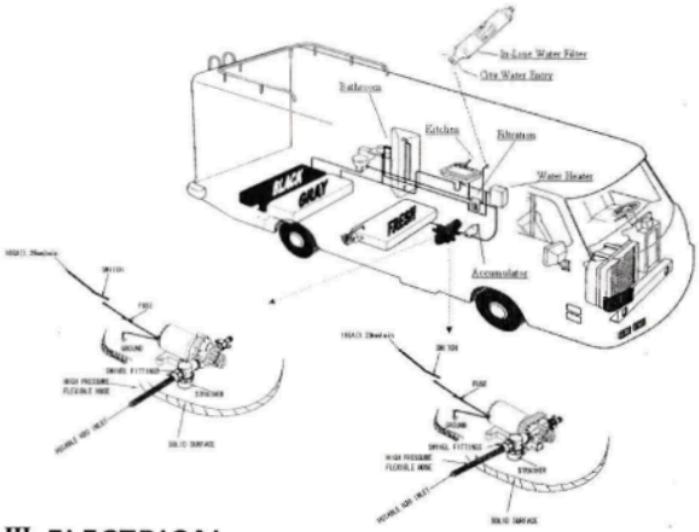
MOUNTING

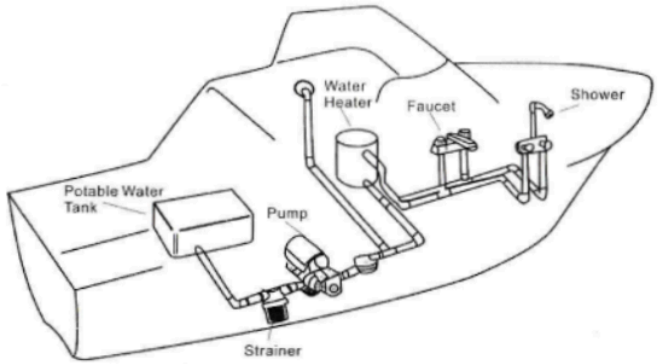
- The pump can be at the same level or below the water tank. It may be positioned above the water tank if needed, as it is capable of a 9.8FT (3m) vertical prime, Horizontal inlet tubing will allow priming to 30 FT(9m). Suggested vertical prime height: 6 FT(1.8m)
- Consider a dry location that allows easy access if maintenance is required. The pumps should not be located in an area of less than one cubic foot unless adequate ventilation is provided. Excessive heat may trigger the integral thermal breaker and interrupt operation. When the temperature drops the breaker will automatically reset and start proration.
- The pump can be mounted in any position. If mounting the pump vertically. The pump head should be in the down position.
- The mounting feet are intended to isolate the pump from the mounting surface; over-tightening, flattening, or use of oversized screws will reduce the ability to isolate vibration and noise through the lines.

PLUMBING

- We recommends at least 1 FT [0.3m] of 1/2" [13mm]1.D. flexible high pressure tubing to both ports. Ideally the pump's ports/strainer should not be connected to plastic or rigid pipe. The pump's normal oscillation may transmit through rigid plumbing causing noise, and possibly loosen or crack components.
- Installation of a 50 mesh strainer is recommended to prevent foreign debris from entering the pump. Hex/swivel barb fittings provide easy removal if maintenance or access is required.
- The fittings are designed with a "taper-seal", creating a water tight connection when hand-tightened Always Secure barb tubing connections with properly sized stainless steel clamps to prevent leaks. Be careful when using sealant on the threads. Sealer may enter the pumps causing a failure. Failure due to foreign debris is not covered under warranty.

- Rapid cycling may be caused by excessive back pressure created by one or more of the following within a plumbing system: Water filters and purifiers not on separate feed lines, Flow restrictors in faucets and shower heads, lines Pipe/tubing should be at least 1/2"[13mm] for main lines. Restrictive fittings and connections (elbows, "T" s, feeder lines to faucets, etc). The pump with bypass do not need to use pressure tank.
- The adjustable pressure range of the product is 40-80PSI. All purchased models have default factory setting pressure values. (**Obtain the factory setting pressure values through the product label.**)
- Tip: All joints and hose connections must be fixed during installation to prevent air from leaking into the water pipes





III ELECTRICAL

- The pump should be on a dedicated (individual) circuit protected by the specified fuse indicated on the motor label.
- The pump must be grounded to a known ground (battery). The ground wire must be the same size (gauge/Mm2) as the positive wire.
- Wire Sizing: Proper wire sizing is required for good pump operation. If the wire is too small, low voltage will affect the pump performance and can create a fire hazard.

- The total current draw on the circuit must not exceed 15 amps. If the pump is used in conjunction with other components, overload current protection (fuse or circuit breaker) and wire size must be for the total amp requirements of all devices on the circuit.
- Use wires of appropriate size and ensure proper electrical protection. Use fuses of different current sizes according to different models pumps **(more than three ☒mes the max current)**

Ⅳ OPERATION INSTRUCTIONS (Only for Diaphragm Water Pumps 33/42/55 series)

This pump is designed for intermittent duty only. Do not use the pump under anti-osmosis filtering system. Continuous running under higher pressure may reduce pump life and it is not under the warranty.

Where a spring loaded by-pass valve opens, allowing flow back from the output side to the input side, providing smooth, steady flow with virtually no cycling, all the way down to a trickle. As a faucet is opened back up, the pressure will drop, the by-pass will close and full flow is again obtained. This allows good flow, even with today's restrictive showers and pullout sprayer faucets. Performance will vary, of course, depending on the voltage to the pump; lower voltage=lower flow, higher voltage=higher flow. Remember your electrical safety: It is always best to shut off power to the pump OFF when leaving the RV unattended.

About the By-Pass Note: By-pass adjustment should be performed by professional technicians with proper gauge and equipment.

The by-pass is a spring loaded diaphragm that opens up allowing water from the discharge side back to the inlet side. If the switch or by-pass is adjusted too much, the by-pass and switch shut-off can overlap and THE PUMP WILL NOT SHUT OFF.
Screwing the switch screw in clockwise will raise the shut-off pressure. Unscrewing the switch screw counterclockwise will lower the pump shut-off pressure. Screwing the by-pass screw in will raise the pressure at which the by-pass starts and raise the full by-pass pressure. Unscrewing the by-pass screw counterclockwise will lower the pressure at which by-pass starts and lower the full by-pass pressure.

WARNING: If full by-pass is reached before the shut-off setting, the pump will not shut off. Full by-pass pressure setting should be at least 5 psi higher than pump shut off pressure.

V SANITIZING:

Potable water systems reguire periodic maintenance to deliver a consistent flow of fresh water. Dependingon use and the environment the system is subject to, sanitizing is recommended prior to storing andbefore using the water system after a period of storage. Systems with new components, or ones that havebeen subiected to contamination, should also be disinfected as follows.

1. Use one of the following methods to determine the amount of common household bleach neededtosanitize the tank.
A) Multiply "gallons of tank capacity" by 0.13; the result is the ounces (oz.) of bleach neededtosanitize the tank.
B) Multiply "liters of tank capacity" by 1.0; the result is the mililiters of bleach needed to sanitize thetank.
2. Mix into solution the proper amount of bleach within a container of water.
3. Pour the solution (water/bleach) into the tank and fill the tank with potable water.
4. Open all faucets (HOT & Cold) allowing the water to run until the distinct odor of chlorine is detected

VI WINTERIZING:

If water is allowed to freeze in the system, serious damage to the plumbing and the pump may occur.Failures of this type will void the warranty.The best guarantee against damage is to completely drain thewater system.

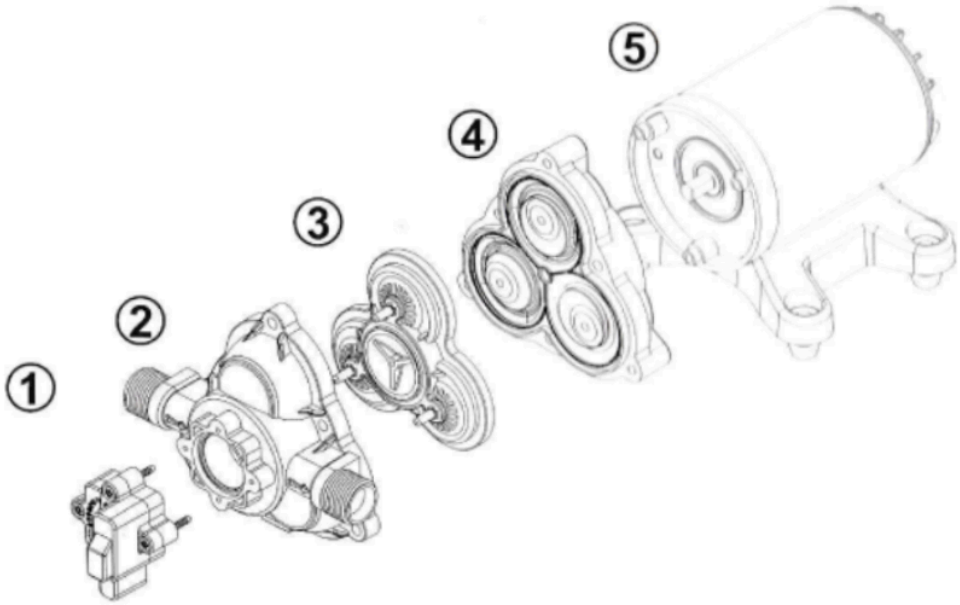
NOTE :

When used per the manufacturer's recommendations non-toxic antifreeze for potable water is safe for use with our pumps. Refer to the manufacturer for their specific winterizing & drainage instructions.

Do not use Automotive Antifreeze to winterize potable water systems. Such solutions are highly toxic. Ingestion may cause serious injury or death.

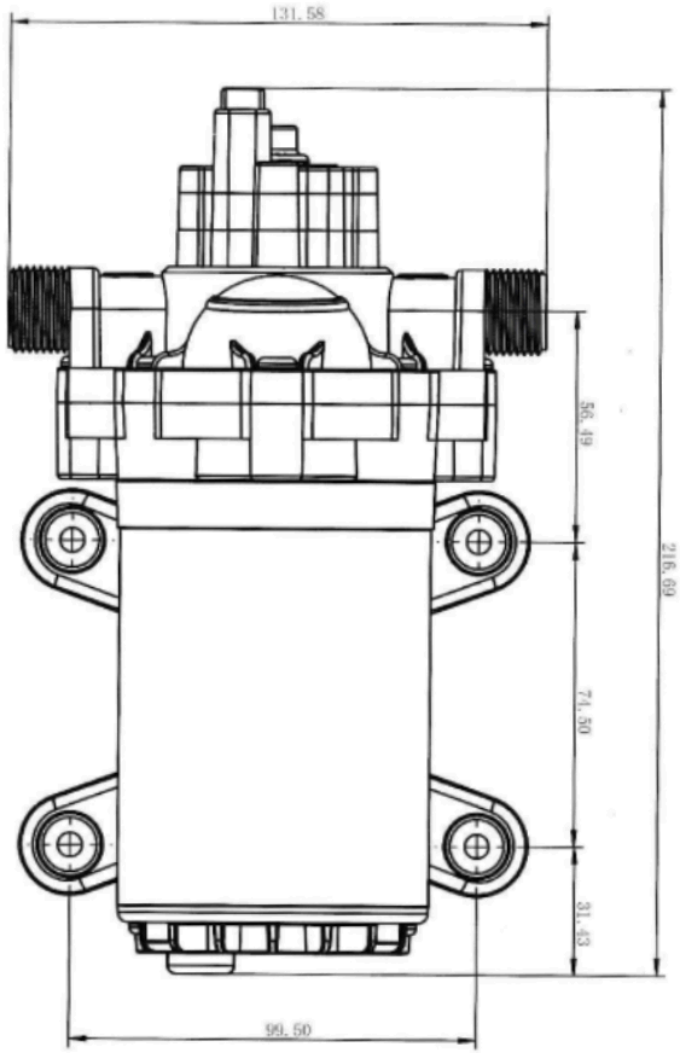
VII PRODUCT DIMENSIONS & STRUCTURES

33-Series-12Volt

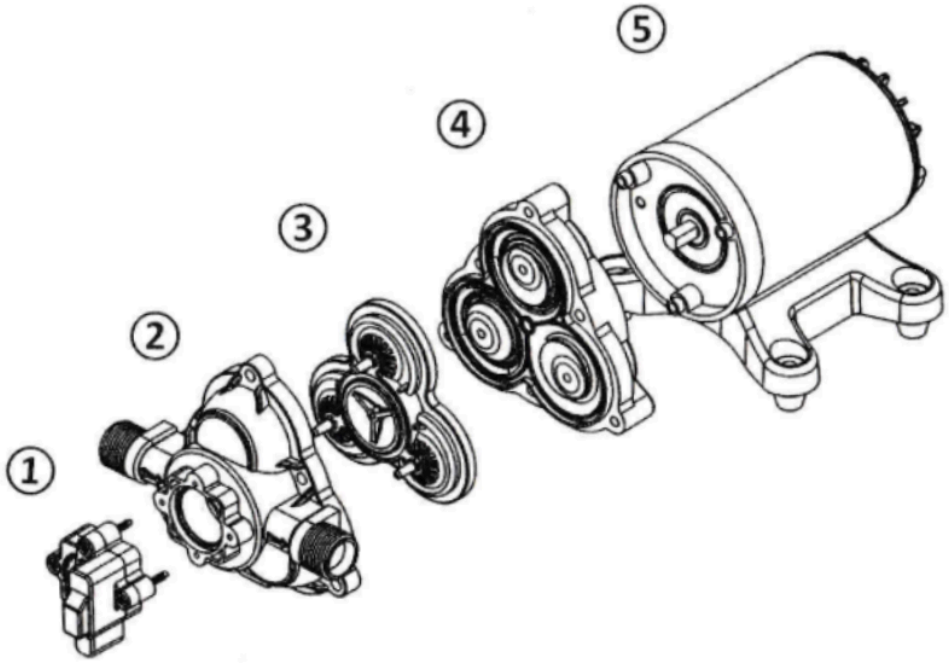


NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor

unit:mm

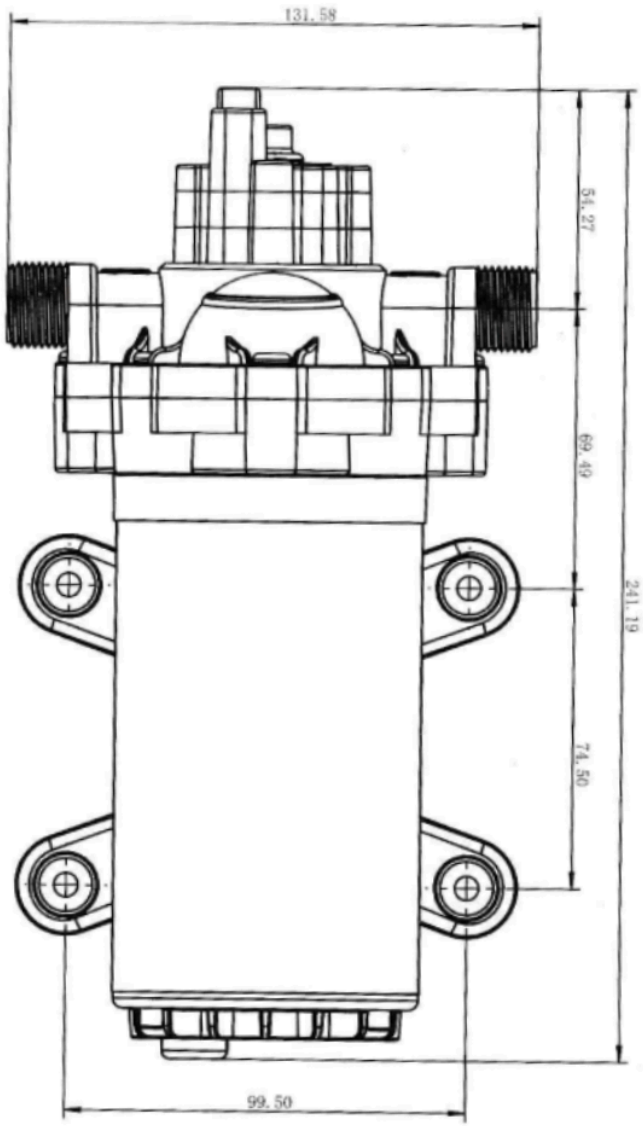


33-Series-110Volt



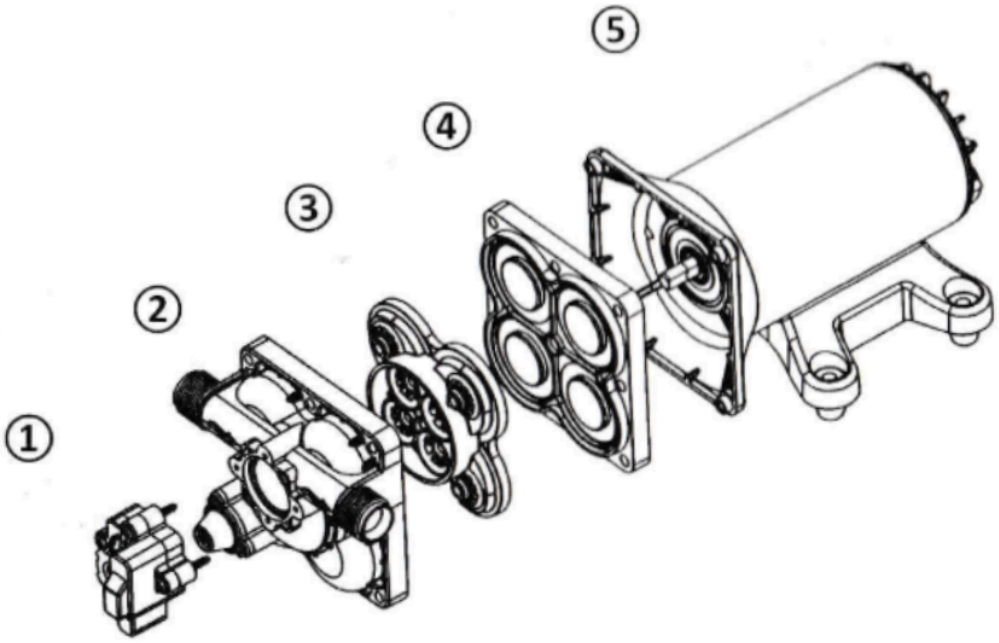
NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor

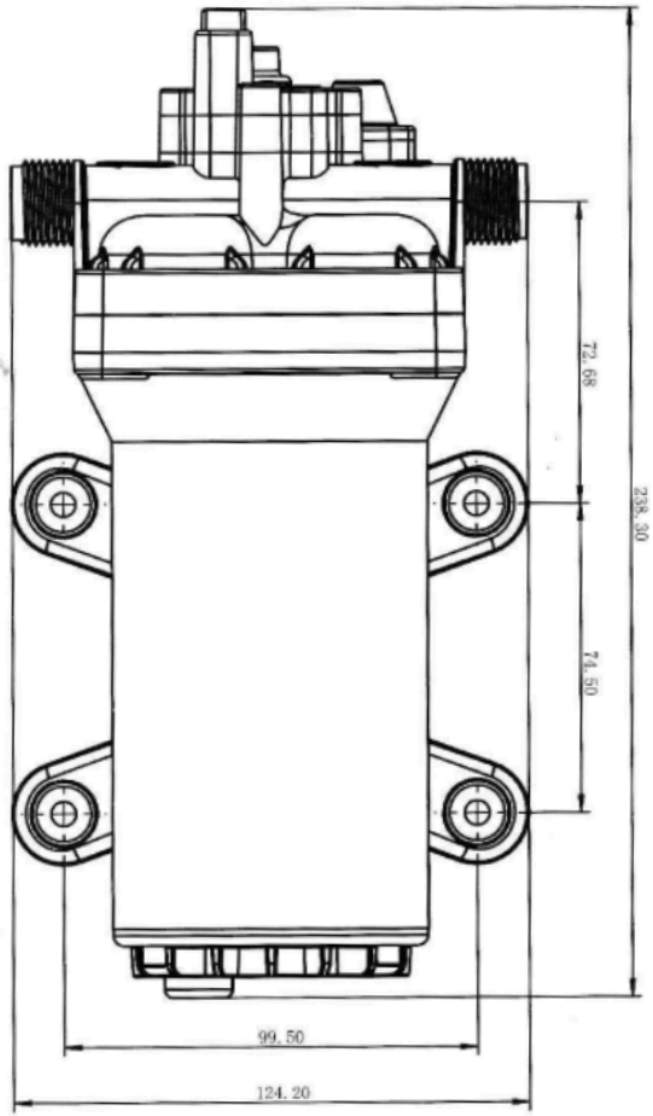
unit:mm



42-Series-110Volt

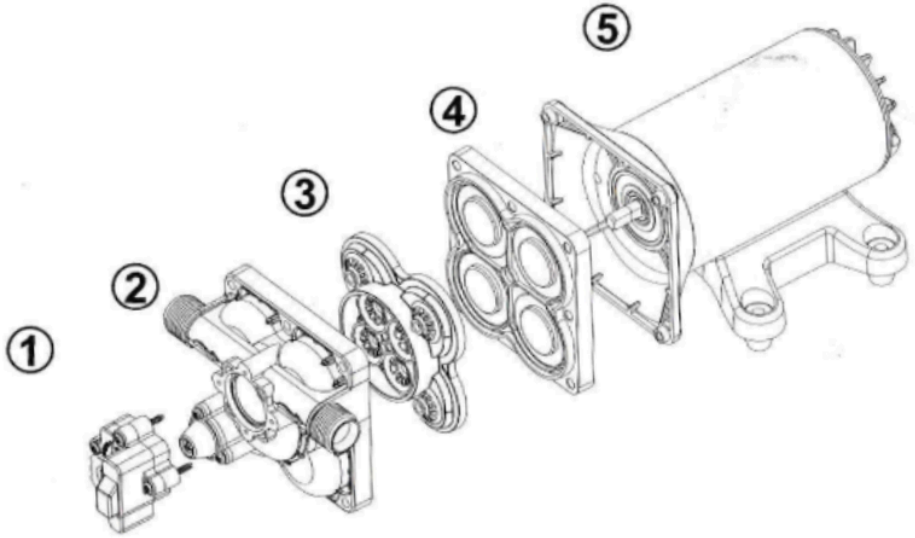
unit:mm





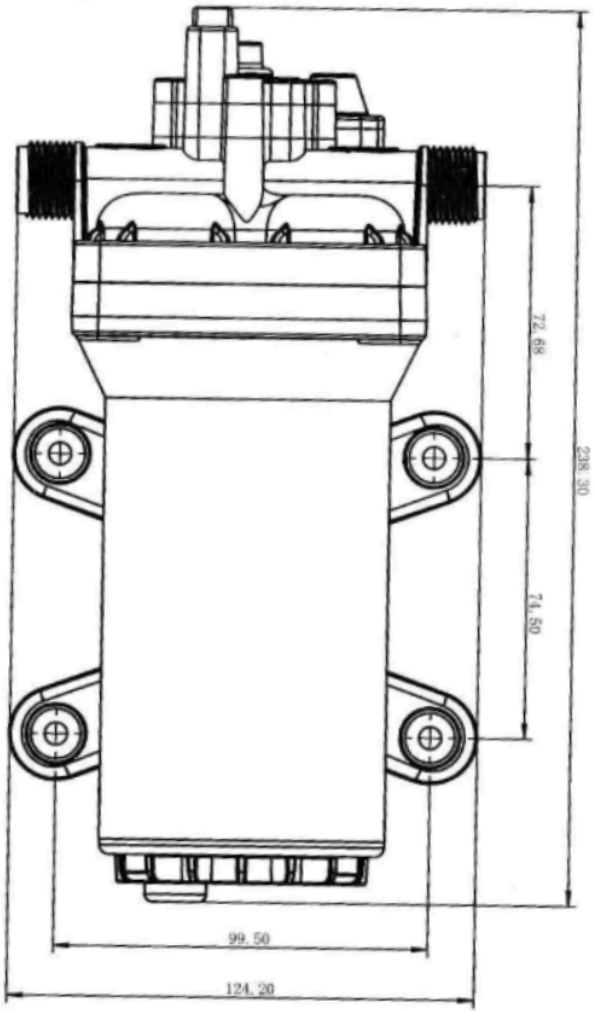
NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor

42-Series-12Volt（Long Model)

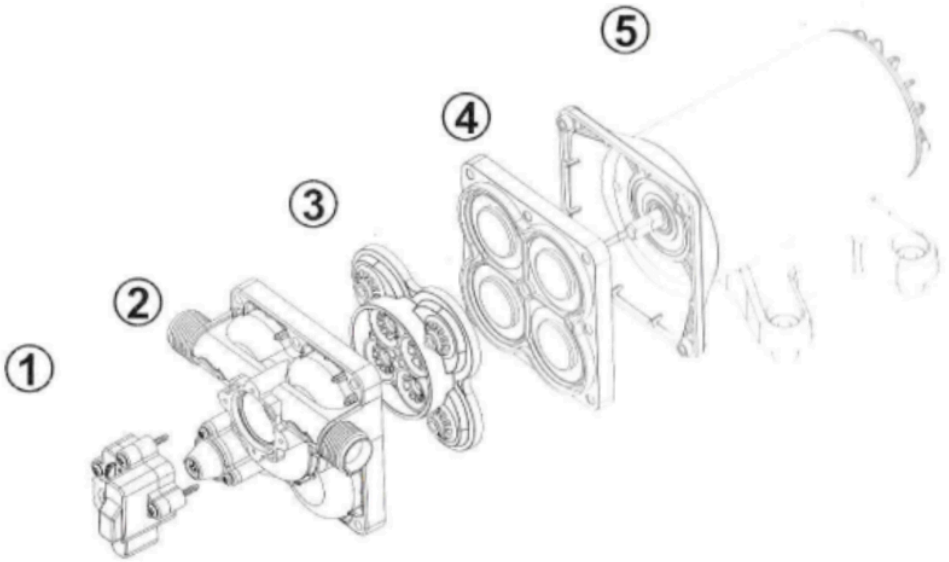


NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor

unit:mm

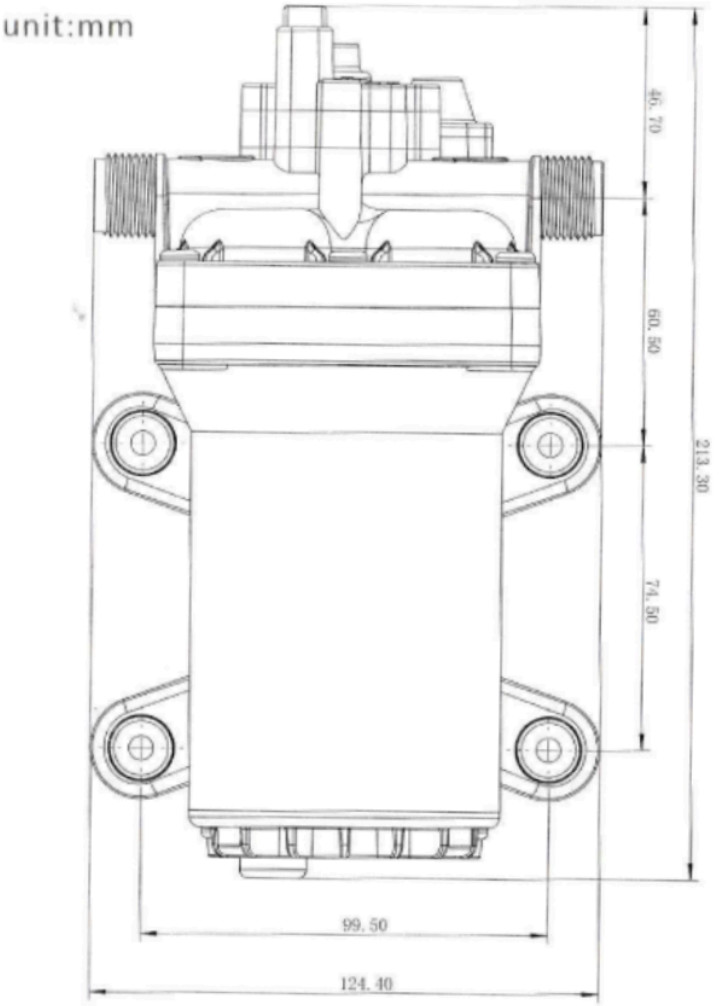


42-Series-12Volt（Short Model)

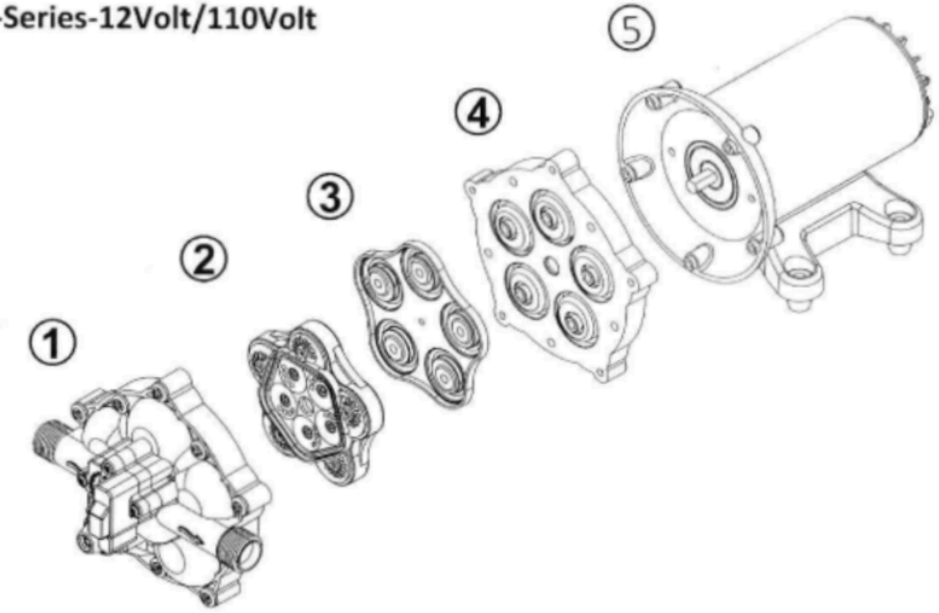


NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor

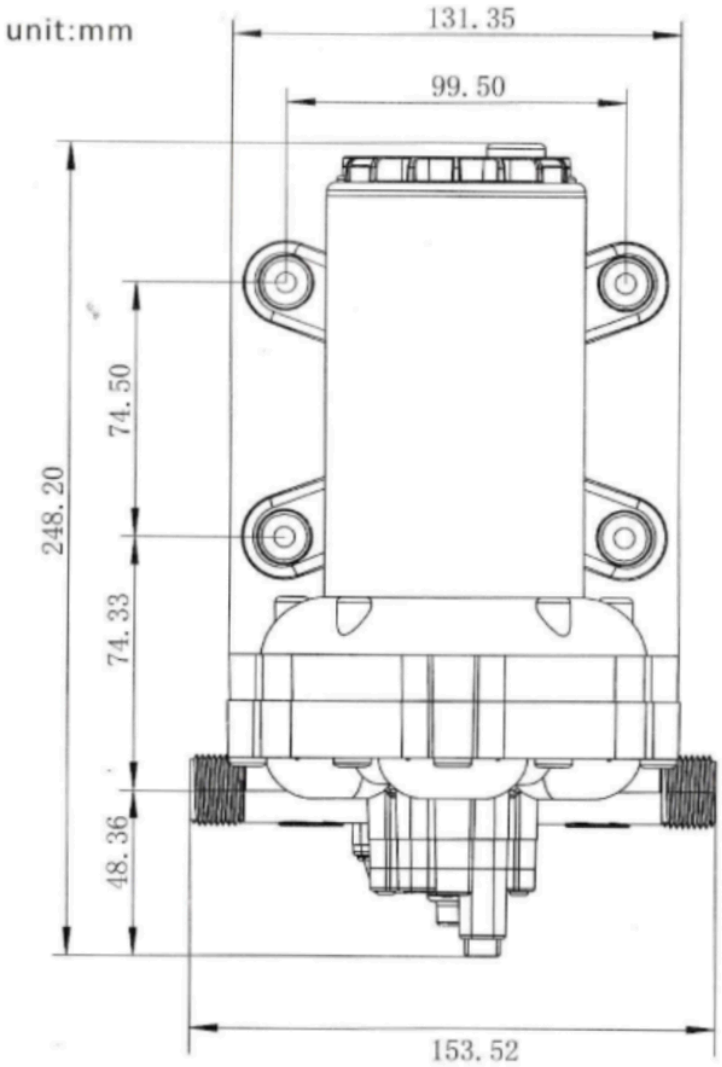
unit:mm



55-Series-12Volt/110Volt



NO	Component
1	Pressure switch
2	Pump head
3	Valve plate assembly
4	Diaphragm/ Drive assembly
5	Motor



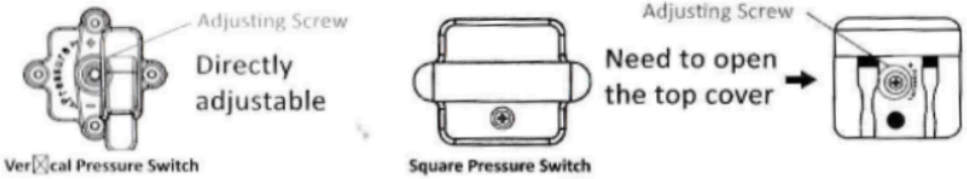
VIII COMMON TROUBLESHOOTING

Question 1: The pump pulsates during operation. (Clicking sound.)

① Check whether there is leakage at the outlet of the water pump and the pipeline connecting the outlet.
② The water flow of the water outlet is too small. (Method: Replace larger water export.)

Question 2: How to adjust the pressure switch?

① Open the pressure switch cover with screwdriver.
(Not required for all models)



② Turn hex bolt clockwise pressure becomes larger, turn counterclockwise becomes smaller.
TIP: Usually the pressure value setting at the factory can meet daily needs, and it is not recommended to adjust it by yourself; if there is a need to adjust the pressure value, you can adjust it after contacting after-sales technical support.

Question 3: The water pump does not turn off when it reaches pressure or the faucet has been closed.

① Check whether there is air leakage at the water inlet and inlet pipeline of the water pump.
② Re-tighten the transparency cover of the strainer.
③ If a timer is installed in the water system, check the installation position of the timer. The timer is installed at the outlet of the water pump, not the inlet.
④ The pressure switch pressure value is too high. (Method: Rotate the pressure switch counterclockwise.)
⑤ The pressure values of the pressure switch and the bypass switch overlap. (Existing in the 42 series;
Method: rotate the pressure switch counterclockwise or the bypass switch clockwise.)
⑥ Pressure switch damaged.

Question 4: No pump water, but the motor is running.

① Check whether the plugs at both ends are removed.
② The distance between the water source and the pump exceeds the water pump self-priming capacity. The vertical distance is approximately 9.8 feet.
③ Check if the inlet pipe is completely placed in the water source.
④ Check if the delivery distance exceeds the lift capacity of the pump. Approximately 98 feet.
⑤ Check whether the power supply meets the minimum power requirement. (DC Power Supply Water Pump, the load current must be higher than the maximum current of the pump.)
⑥ Is the motor hot? Thermal breaker may have triggered: it will reset when cool.

Question 5: The pump does not work.

① Check if the power cord is accurately plugged.
② DC power pump, check whether the power supply meets the minimum power requirements. (The load current must be higher than the maximum current of the pump.)
③ Is the inlet tubing/plumbing sucking in air at plumbing connections (vacuum leak)?
④ Check if the pressure switch is damaged.
TIP: The inspection method of the pressure switch is to connect the two wires connecting the pressure switch, bypass the pressure switch it. If the water pump starts to work, indicates that the pressure switch is damaged.
(Make sure to test with the power off.)

Adjusting Screw
Bypass pressure switch and direct connect
Vertical Pressure Switch
Square Pressure Switch
Adjusting Screw
Need to open the top cover
Bypass pressure switch and direct connect

Question 6: Leakage problem. Confirm the leak location.

① Leakage at the threaded connection. There is a gap between the adapter and the thread, which causes leakage, especially when a brass adapter is used. (Method: Wrap the thread with raw tape before connecting the adapter.)
② Leakage at the pump head. The screws are not tightened or the seal is invalid.
(Method: Try to tighten the screws at thepump head first.)
③ Leakage at the pressure switch and the tail of the fuselage. It may be due to defects in materials and workmanship.

If the above common troubleshooting fails to solve your problem, or the common troubleshooting does not cover your problem, please contact us through the Amazon or via our email. (Email address: infodchouse@sohu.com) We will reply to your email within 24 working hours after receiving your email, and will provide you with corresponding after-sales service as soon as possible after confirming the cause of the fault.

IX Regulations

We promise to provide for 1month unconditional refund or replacement service, 3 months refunds or replacement service in case of damage caused by product quality issues. 2 years warranty period and permanent online after-sales technical support. We have professional technicians to troubleshoot and provide solutions for you. In case of any product usage problems or product quality issues please contact us through Amazon Orders. If you don't know how to get in touch with us through order, you can through Customer Support Email infodchouse@sohu.com.

The Limited Warranty protects against defects in workmanship and materials under normal use and service for products manufactured in our stores. This warranty is effective from the date of purchase by the user. This limited warranty covers material defects in materials, workmanship and performance. If any product that meets the standards of our store fails to honor this limited warranty, and any is determined by the warrantor's technical support team, the warrantor will repair or replace the defective product with a new product. All replacement products will be compatible with the original product with equal or greater power ratings (in some cases). If for any reason our store is unable to repair or replace the defective product, then a refund is available.

Regarding Workmanship and Material Warranty: If Buyer encounters any defects in materials and workmanship under normal application, such as defects and/or failures due to manufacturing or materials, it is the responsibility of Our Store to contact a warranty technician who will provide steps and procedures to test the product, repair the product, or request that the Buyer ship the product to a technical support team as needed. Based on the findings, warranty service will be honored.

The product is not covered by the warranty if one of the following situations occurs during the warranty period:

1. Failure to provide a warranty letter and valid proof of purchase.
2. Product failure and damage caused by incorrect installation and improper use or maintenance of storage.
3. Damage caused by self-removal or modification, unauthorized maintenance will not be returned.
4. Product failure and damage caused by incorrect transportation after purchase, intentional or accidental misuse contamination with hazardous substances.
5. The use of unusual electrical stresses, including surges, uncontrolled voltages and currents, excessive or insufficient energy supply.
6. Exposure of the product to extreme high or low temperatures and damage caused by force majeure reasons are not covered by the warranty, such as fires, floods, earthquakes, hurricanes, severe weather, wars and acts of terrorism.

Warranty Card

Dear customer:
First of all, thank you very much for choosing our products . In order to provide you with more satisfactory service and better protect your rights, please read this regulation carefully and keep your warranty card properly.

After-sales service

In order to better serve you or troubleshoot product issues more quickly, please provide the following information when contacting us through Amazon/Return and Exchange Service/Email Address

Product Name/Model _____

Purchase Order Number _____

Product Problem Description _____

what steps you've taken to resolve the issue _____

_____

If allowed, send a clear photo or video showing the defect, these should be taken in good lighting.

Buyer's Name _____

Contact Number _____

Email Address _____

_____